



Launch Mission Execution Forecast

Mission: Atlas V CST-100 OFT-2

Issued: 18 May 2022 / 0830L (1230Z)

Valid: 19 May 2022 / 1845 – 1905L (2245 – 2305Z)



Forecast Discussion: *No significant change to the forecast reasoning.* The coverage of afternoon showers and thunderstorms is expected to remain isolated to scattered both today and tomorrow – and predominantly west of Interstate 95 where the sea breezes are more likely to interact. For MLP Roll activities today, mainly dry conditions are forecast along the immediate coast with a small chance, less than 20%, of a shower or thunderstorm in the afternoon and evening as the Atlantic sea breeze shifts west of the area. Similar conditions are expected tomorrow, with isolated afternoon activity expected to develop near or just west of the launch complex, bringing a chance of a Cumulus Cloud Rule and/or Anvil Cloud Rule violation during the count. Precipitation chances increase substantially on Friday as winds increase out of the south and draw a plume of deeper moisture upward from the Caribbean. As a result, the forecast remains more pessimistic for the backup opportunity with higher probabilities of violations of the Cumulus Cloud Rule, Anvil Cloud Rules, and Flight through Precipitation constraint.

Launch Day	Probability of Violating Weather Constraints ¹						
	30%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules					
	Weather Conditions					Additional Risk Criteria ²	
	Weather/Visibility:	Iso Storms / 7 mi.	Clouds				Solar Activity: Low
			Type	Coverage	Base (ft)	Tops (ft)	
	Temp/Humidity:	80°F / 78%	Cumulus	Few	3,500	8,000	
	Ground Winds (230'):	150° 16 - 21 knots	Cirrostratus	Broken	26,000	35,000	
24-Hour Delay	Probability of Violating Weather Constraints						
	70%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules, Flight through Precipitation					
	Weather Conditions					Additional Risk Criteria	
	Weather/Visibility:	Sct Storms / 7 mi.	Clouds				Solar Activity: Low
			Type	Coverage	Base (ft)	Tops (ft)	
	Temp/Humidity:	77°F / 88%	Cumulus	Scattered	2,500	12,000	
	Ground Winds (230'):	170° 14 - 19 knots	Altocumulus	Broken	15,000	20,000	
Notes	<p>1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window.</p> <p>2. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.</p> <p>See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information.</p>						
Next Forecast Will Be Issued		19 May 2022					